

Second Report on Hawaiian Polyclads

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THE MATERIAL of this report was kindly presented to me by Dr. C. E. Cutress. It adds slightly to our knowledge of the polyclad fauna of the Hawaiian Islands, reviewed in my previous report (Hyman, 1954). To the references given therein should be added Pease (1860), previously overlooked. Pease described and illustrated in color four polyclads from the Hawaiian Islands (exact location not stated); of these two are probably not identifiable.

The present specimens were collected under rocks in the intertidal zone at Makapuu Point, Oahu, in March, 1953.

ORDER POLYCLADIDA
SUBORDER ACOTYLEA
SECTION SCHEMATOMMATA
FAMILY PLANOCERIDAE

Paraplanocera oligoglana (Schmarda, 1859)

The occurrence of this almost circumtropical species in the Hawaiian Islands was previously recorded (Hyman, 1954: 333). The present specimen measures 28 by 21 mm. It is thin and ruffled; the color in life is described as tan or buff dotted with dark brown. There is little doubt that *Peasia reticulata* Pease (1860: 37) is identical with *Paraplanocera oligoglana*. Pease gives a recognizable colored figure (pl. 70, figs. 1, 2) and a colored figure also appears in Stummer-Traunfels (1933, col. pl. following p. 3596, fig. 6).

SUBORDER COTYLEA
FAMILY PSEUDOCERIDAE

Thysanozoon hawaiiensis, n. sp.

Fig. 1

The single specimen is of oval form and thin consistency, measuring 24 by 13 mm. The color in life was stated to be light ochre with dull-

green papillae. At the center of the anterior margin are seen the usual pair of tentacular folds, bearing eyes. Behind them is a rounded cluster of cerebral eyes. This is followed by the ruffled pharynx of compact oval outline. Because of damage in the critical region, just behind the pharynx, it could not be determined whether the male apparatus is single or paired. The female gonopore and the sucker, located as shown in the figure, were readily noticeable. The sucker occurs at about half the length of



FIG. 1. *Thysanozoon hawaiiensis*. 1, Tentacles; 2, cerebral eye cluster; 3, pharynx; 4, female gonopore; 5, sucker; 6, uteri with eggs; 7, papillae, shown in part only; 8, mouth.

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the animal. To either side in the middle region of the worm the brown uterine networks filled with eggs are conspicuous even to the naked eye. As typical of the genus the dorsal surface bears numerous papillae with rounded tips. They are only fairly numerous and not thickly set. They are not entered by a branch of the intestine.

It has been very difficult for me to decide whether the present species might not be identical with *Peasia tentaculata* (Pease, 1860: 37), which is obviously a species of *Thysanozoon*. Neither the description nor the colored figure (pl. 70, figs. 5, 6) are very helpful. The color is stated to be light fawn with darker papillae, agreeing well enough with the present specimen, but the red line around the margin does not agree. The papillae are depicted as pointed and described as mucronate, that is, suddenly narrowing to a pointed tip. The features of the ventral surface in Pease's figure are not understandable in terms of the genus. Because of these discrepancies I judge it preferable to consider my specimen an undescribed species.

The specimen in alcohol is deposited as a holotype in the Bishop Museum.

Pseudoceros affinis (Kelaart, 1858)

The specimen is of oval form, measuring 30 by 20 mm., with ruffled margins and typical tentacular folds at the anterior margin. The color is described by the collector as deep violet with a bright orange margin edged with black. The species has a pair of male apparatuses. The male gonopores occur at 12 mm. from the anterior margin, the female gonopore at 13.5 mm., and the sucker at 17.5 mm., hence situated considerably anterior to the middle. In addition to the colored figure in Collingwood (1876, pl. 19, fig. 23), there is a colored figure in Stummer-Traunfels (1933, col. pl. following p.

3596, fig. 11). This latter figure closely resembles my specimen.

Pseudoceros affinis is probably common in the tropical west Pacific. The original specimen came from Ceylon and the specimen in Stummer-Traunfels was part of the Semper material collected in the Philippines; the colored figure was made from life by Mrs. Semper. The present record from the Hawaiian Islands indicates an extensive range for the species.

REFERENCES

- COLLINGWOOD, C. 1876. On thirty-one species of marine planarians, collected partly by the late Dr. Kelaart, F. L. S., at Trincomalee, and partly by Dr. Collingwood, F. L. S., in the eastern seas. *Trans. Linn. Soc. Lond.*, ser. 2, Zool. 1: 83-98, pls. 17-19.
- HYMAN, LIBBIE H. 1954. Some polyclad flatworms from the Hawaiian Islands. *Pacif. Sci.* 8: 332-336, 3 figs.
- KELAART, E. F. 1858. Description of new and little known species of Ceylon nudibranchiate molluscs and zoophytes. *J. Ceylon Br. Roy. Asiat. Soc.* 1856-1859: 134-139.
- PEASE, W. HARPER. 1860. Descriptions of new species of Planariidae collected in the Sandwich Islands. *Proc. Zool. Soc. Lond.*: 37-38, pl. 70.
- SCHMARDA, LUDWIG. 1859. Neue wirbellosen Thiere beobachtet und gesammelt auf einer Reise um die Erde. Erster Band, Turbellarien, Rotatorien, und Anneliden. Wilhelm Engelmann, Leipzig. Erste Hälfte, xviii + 66 pp., 15 pls.
- STUMMER-TRAUNFELS, R. 1933. Polycladida. In: *Klassen und Ordnungen des Tierreichs*, H. G. Bronn, ed. Vol. 4, Abt. 1c, Lief. 179, pp. 3485-3596, 176 text figs., 1 col. pl.